I. Amendments t the Sp cification

Please replace paragraphs [0055] and [0056] with the following amended paragraphs:

[0055] The yaw rate reference used in the PID controller 278 is a linear representation of yaw rate for a neutral steer vehicle which is represented in the equation [[$\overset{g}{\psi} ref = \frac{\delta_f V}{l}$ wherein $\overset{g}{\psi}$]] $\dot{\psi}\ ref = \frac{\delta_f V}{l}$ wherein $\dot{\psi}$ equals yaw rate, δ_f equals the angle of the front wheels of the vehicle, which as noted above, may be calculated from the steering wheel angle sensor 52, V equals the speed of the vehicle and l equals the wheel- base.

[0056] This equation may be multiplied by a gain K to permit tuning of the vehicle characteristics from understeer to oversteer: [[$\overset{g}{\psi} ref = k_{ref} \frac{\delta_f V}{l}$]] $\dot{\psi}\ ref = k_{ref} \frac{\delta_f V}{l}$. This reference signal is accurate at relatively low lateral accelerations and is sufficient for use in this system. Greater accuracy and higher lateral acceleration can be achieved by representing the curvature response to a steer angle through use of the equation [[$\overset{g}{\psi} ref = \frac{\delta_f V}{l(1+KV^2)}$]] $\dot{\psi}\ ref = \frac{\delta_f V}{l(1+KV^2)}$. The subroutine 302 then moves to a process step 314 which takes the derivative of the calculated yaw rate to provide a yaw acceleration reference value. In the process step 316, a yaw rate error is calculated through use of the equation [[$\overset{g}{\psi} error = \overset{g}{\psi} ref - \overset{g}{\psi} measured$, the $\overset{g}{\psi} ref$]] $\dot{\psi}\ error = \dot{\psi}\ ref - \dot{\psi}\ measured$, the $\dot{\psi}\ ref$ being calculated in the process step 312. Next, the subroutine 302 moves to a process step 318 which reads the sign of the yaw rate error. If the reference yaw rate is greater than the measured yaw rate, this value is

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positive; if the reference yaw rate I is less than the measured yaw rate, this value is negative. In a process step 322, the yaw acceleration is calculated and these various values are used in a process step for the PID controller 278 to generate the right or left torque request according to the equation [[$T_{request} = K_p \overset{g}{\psi}\, error + K_1 \int \overset{g}{\psi}\, error + K_D \left(\frac{d}{dt} \overset{g}{\psi}\, error \right)$]] $\underline{T_{request} = K_p\, \dot{\psi}\, error + K \int \dot{\psi}\, error + K_D \left(\frac{d}{dt}\, \dot{\psi}\, error \right)}$.

The subroutine 302 then provides a right clutch control torque, a left clutch control torque as well as the calculated values of the yaw acceleration, the yaw acceleration reference value and the yaw error sign.

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